

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

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1. (Currently Amended) In a multi-service network switch, a method for providing tiered access to system resources, the method comprising:

maintaining in a data store of the network switch an access level for a characteristic associated with a connection request, the access level being associated with an access threshold;

receiving an incoming connection request;

determining the characteristic of the incoming connection request;

retrieving the access level for the determined characteristic from the data store;

assigning [an] the retrieved access level to the incoming connection request [based on a characteristic of an incoming connection request, the access level being associated with an access threshold];

identifying the resource requested by the incoming connection request;

determining an amount of current usage for the identified resource; and

allocating the identified resource to the incoming connection request if the amount of current usage is less than the access threshold associated with the assigned access level.

2. (Original) The method of claim 1 further comprising:
terminating an established connection based on its access level;
and

deallocating the resource previously allocated to the terminated connection.

3. (Original) The method of claim 2, wherein the system resources are partitioned among a plurality of virtual routers, and the monitoring usage of the system resources comprises monitoring usage of the system resources associated with each virtual router.

4. (Original) The method of claim 1, wherein the characteristic of the incoming call is a type of inlink carrying the incoming connection request.

5. (Original) The method of claim 1, wherein the characteristic of the incoming call is a telephone number associated with the incoming connection request.

6. (Original) The method of claim 1, wherein the characteristic of the incoming call is a type of user submitting the connection request.

7. (Original) The method of claim 1 further comprising:
communicating a request for the identified resource, the communicated request including the identified quality of access level;
communicating a response indicating that the identified resource is available; and
communicating a request to allocate the identified resource.

8. (Currently Amended) A multi-service network switch providing tiered access to system resources, the switch comprising:

a data store storing an access level for a characteristic associated with a connection request, the access level being associated with an access threshold;

means for receiving an incoming connection request;

means for determining the characteristic of the incoming connection request;

means for retrieving the access level for the determined characteristic from the data store;

means for assigning [an] the retrieved access level to the incoming connection request [, the access level being associated with an access threshold];

means for identifying the resource requested by the incoming connection request;

means for determining an amount of current usage for the identified resource; and

means for allocating the identified resource to the incoming connection request if the amount of current usage is less than the access threshold associated with the identified access level.

9. (Original) The switch of claim 8 further comprising:

means for terminating an established connection based on its access level; and

means for deallocated the resource previously allocated to the terminated connection.

10. (Original) The switch of claim 9, wherein the system resources are partitioned among a plurality of virtual routers, and the means for monitoring usage of the system resources comprises means for monitoring usage of the system resources associated with each virtual router.

11. (Original) The switch of claim 8, wherein the means for assigning the access level comprises means for assigning the access level based on a characteristic of the incoming call.

12. (Original) The switch of claim 8, wherein the means for assigning the access level comprises means for assigning the access level based on a type of user submitting the connection request.

13. (Original) The switch of claim 8 further comprising:
means for communicating a request for the identified resource,
the communicated request including the identified quality of access level;

means for communicating a response indicating that the identified resource is available; and

means for communicating a request to allocate the identified resource.

14. (Currently Amended) A multi-service network switch including a plurality of interface modules, each interface module comprising:

interface lines for receiving an incoming connection request;
a data store storing an access level for a characteristic associated with a connection request, the access level being associated with an access threshold;

~~[a memory storing a plurality of access levels, each access level being associated with an access threshold;]~~ and

a processor coupled to the ~~[memory]~~ data store, the processor being operable to execute program instructions including:

determining the characteristic of the incoming connection request;

retrieving the access level for the determined characteristic from the data store;

assigning [an] the retrieved access level to the incoming connection request ~~[based on a characteristic of the incoming connection request]~~;

identifying the resource requested by the incoming connection request;

communicating a request for the identified resource, the communicated request including the assigned quality of access level;

receiving a response indicating that the identified resource is available; and

communicating a request to allocate the identified resource.

15. (Original) The interface module of claim 14, wherein the program instructions further comprise:

monitoring usage of the local resources for each access level;

receiving the request for the identified resource;

determining an amount of current usage for the identified resource; and

allocating the identified resource to the incoming connection request if the amount of current usage is less than the access threshold associated with the assigned access level.

16. (Original) The interface module of claim 14 wherein the program instructions further comprise:

terminating an established connection based on its access level; and

deallocating the resource previously allocated to the terminated connection.

17. (Original) The interface module of claim 14, wherein the local resources are partitioned among a plurality of virtual routers, and the memory stores the list of local resources for each virtual router.

18. (Original) The interface module of claim 14, wherein the characteristic of the incoming call is a type of inlink carrying the incoming connection request.

19. (Original) The interface module of claim 14, wherein the characteristic of the incoming call is a telephone number associated with the incoming connection request.

20. (Original) The interface module of claim 14, wherein the characteristic of the incoming call is a type of user submitting the connection request.

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